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THE ROLE OF IVABRADINE IN PATIENTS UNDERGOING CARDIAC REHABILITATION FOR RECENT CORONARY SURGERY

Poster Contributions
Hall C
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Background: The purpose of this study was to evaluate the efficacy of adding Ivabradine to β-blockers during cardiac rehabilitation in patients with recent coronary artery bypass (CAB).

Methods: Between June 2012 and June 2013, 81 out of 150 patients, admitted at our Cardiac Rehabilitation Unit after a median interval time of 10 days from CAB, were scheduled for this prospective randomized study according to the following criteria: normal LVEF, sinus rhythm, heart rate >70 bpm, stable clinical condition.

The patients were randomized into two groups: Group I (n=38): Ivabradine (5 mg bid) + β-blocker (bisoprolol 1.25 mg od) and Group B (n=43): β-blocker (bisoprolol 2.5-5mg od). All the patients were evaluated at admission, discharge, and after 3 months of follow-up.

Results: The ejection fraction improved significantly in Group I, both at discharge and follow-up. In Group I, patients showed a significantly impaired functional status at 6-minute walking test (6MWT), that improved during cardiac rehabilitation and at follow up; the percentage improvement of distance during 6MWT was significantly higher in Group I (55% vs 42% after 3 months). Finally, the rate of diastolic dysfunction increased significantly in Group B, but decreased significantly in Group I.

Conclusion: In patients submitted to recent CAB, adding Ivabradine to low dose of β-blockers, throughout cardiac rehabilitation, might improve the recovery of systolic function and exercise capacity, and reduce the rate of diastolic dysfunction.

Table 1	Baseline		Discharge		Follow-up	
	I	B	I	B	I	B
LV ejection fraction (%)	57±3	57±3	59±4	62±4*	59±4	66±3*
6MWT (meters)	215±53	180±91*	314±32	311±58	347±42	370±55
Diastolic dysfunction						
Grade I	63%	58%	50%	63%*	21%	77%*
Grade II	13%	19%	0	19%*	0	7%*
	Δ (baseline-discharge)		Δ (discharge-follow up)		Δ (baseline-follow up)	
Δ Covered distance (%)	120 (80-170)	100 (80-130)	40 (8-88)	40 (0-60)	170 (130-235)	135 (80-177) *